

I CLAIM:

1. A multi-angular load-conveying interface connector for furnishing a connection between a horizontal, structural building-frame beam and an elongate, upright  
5 column having plural angularity intersecting generally planar faces, with the planes of each of two adjacent faces intersecting at a corner characterized by a known angle, said connector structure comprising

an elongate body having a long axis, and adapted to be joined to the outside of such a column with the body's said long axis substantially paralleling the column's long  
10 axis,

said body, when viewed along its long axis, having a generally W-shaped cross-section, including (a) an angular central portion defined by two generally planar expanses that intersect at an angle which is substantially the same as the mentioned known angle between adjacent faces in the column, thus to form a trough adapted to fit and be joined  
15 complementarily as a corner-wrap around a corner on the outside of the column, and in contact with a pair of next-adjacent column faces, and (b) a pair of spaced, generally planar tabs, each joined to, and intersecting at an angle with respect to, a different one of said expanses, adapted, with the body fitted on and around a corner in the column, to extend generally normally outwardly from the respective associated faces in the column.

2. A structural/column/beam interconnect arrangement comprising  
an elongate column having a long central axis, and plural, generally planar,  
outside faces, the planes of each two adjacent ones of which intersect one another to form  
a column corner which is characterized by a known angle,

5 plural angle-section connectors each having an elongate body with a generally W-  
shaped cross-section as viewed along the long axis of a said body, with said cross-section  
being defined by a pair of central generally planar expanses which intersect along the  
length of the body to form an angular trough which is substantially defined by  
substantially same angle as said known angle, and for each said expanse, a joined  
10 substantially planar tab which extends away from said trough at substantially a right  
angle relative to the tab's directly associated expanse,

said connectors being joined to the outside of said column at a common  
longitudinal location therealong, and in a manner wherein each connector is trough-  
seated against the column, with the connector's trough complementarily wrapping around  
15 a column corner, and with at least a pair of said connectors disposed adjacent one another  
in a manner wherein a tab in each confrontingly faces, is spaced from, and substantially  
nominally parallels a tab in the other, outwardly of a common face in the column, with  
the nominal space between said confronting, spaced tabs having a first known dimension,  
each of said confronting tabs having characteristics of an elastically deflectable cantilever  
20 element which can be resistedly deflected toward the other confronting tab effectively to  
diminish the effective spacing between the tabs,

an elongate beam having a generally planar central web with a thickness possessing a second known dimension which is less than said first known dimension, and with one end of said central web received between said confronting tabs, and

fastener structure securing said central web's end to and between said confronting  
5 tabs, and in a manner drawing said tabs elastically and resistedly toward one another to close tightly against opposite sides of said central web's end , thus to introduce a preload compression directed inwardly through said common column face generally toward the column's long central axis.

10 3. The interconnect arrangement of claim 2, wherein, with respect to the placement of a beam for connection to and between a pair of next-adjacent columns, the arrangement is configured to allow for the vertical shifting of the beam into proper place for connection of its central web to and between pairs of spaced tabs, without any need for any lateral shifting of the columns to allow for insertion of the beam between the  
15 columns.